

--ABSTRACT OF THE DISCLOSURE

An OFDM-CDMA transmission apparatus may include a first spreader that carries out spreading processing on a plurality of transmission signals using different spreading codes, respectively. A second spreader carries out spreading processing on at least one known signal using a spreading code different from the spreading codes employed by the first spreader. A frequency division multiplexer breaks down the transmission signals spread by the first spreader and the known signal spread by the second spreader into individual chips and subjects these chips to frequency division multiplexing, thereby assigning one chip data signal string per subcarrier. The frequency division multiplexer operates such that information from each of the plurality of transmission signals and the known signal is multiplexed into every chip assigned to a different subcarrier. After the chips are assigned to the subcarriers, they are transmitted by a transmitter.--